REMARKS/ARGUMENTS

Within the Office Action, claims 1-10 are rejected under 35 U.S.C. § 103(a), and claims 15-17 are rejected under 35 U.S.C. § 112, second paragraph. By way of the above amendments, claims 11-22 have been withdrawn and claims 23-29 have been added. Accordingly, claims 1-10 and 23-29 are pending.

Election of claims 1-10

Within the Office Action, it is stated that claims 1-10 are drawn to an invention in a first group, Group I; claims 11-13 are drawn to an invention in a second group, Group II; and claims 14-22 are drawn to an invention in a third group, Group III. It is further stated that the application is restricted to a single invention and that, in a previous phone call, the Applicants' attorney has elected to prosecute the invention in Group I.

The Applicants affirm the election to prosecute the invention in Group I. Accordingly, by the above amendments, claims 11-22 have been withdrawn.

Rejections under 35 U.S.C. § 112, second paragraph

Within the Office Action, it is stated that because each of the claims 15-17 lacks an antecedent basis for the term "blades," each is rejected under 35 U.S.C. § 112, second paragraph. By way of the above amendments, claims 15-17 have been withdrawn. Accordingly, the rejection of claims 15-17 under 35 U.S.C. § 112, second paragraph, is now moot.

Rejections under 35 U.S.C. § 103(a)

Within the Office Action, claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,563,875 to Hefel et al. (Hefel) in view of U.S. Patent No. 6,633,640 to Cohen et al. (Cohen), either together or further in view of several other prior art patents or publications. The Applicants respectfully traverse these rejections.

Hefel

Hefel is directed to a packet communications network that includes a route testing system. (Hefel, Abstract) The system launches a plurality of wrap-around test messages along a predetermined route, from a source to a destination node. The system works by launching a first test message that travels from the source, along a first leg of the route, and back. The system later determines a one-way travel time along the first leg by halving the round-trip time. The system launches a second test message that travels along a second leg of the route, which includes the first leg, and back. The system later determines a one-way travel time along the second leg by halving this round-trip time. One-way travel times for other legs of the route from the source to the destination are calculated in a similar manner. In this way, the system can determine one-way travel times along each leg of the route from a source to a destination. These one-way travel times help isolate bottlenecks or link failures between the source and the destination.

Within the Office Action, it is stated that Hefel, at col. 3, lines 34-35, teaches determining a prefix for a data flow. This is not true. At column 3, lines 34-35, Hefel merely teaches that a network node provides services that include the calculation of paths between nodes. Nowhere does Hefel discuss calculating a prefix, such as those used for BGP messages to determine groups for which routing decisions can be made.

Next, it is stated within the Office Action that at col. 4, lines 3-9 and 15-23, Hefel discloses "calculating for the plurality of service provider access links, each of which from a router of the one or more routers to the prefix via a distinct service provider access link from the plurality of service provider access links." This statement is unclear. The Applicants read this statement to mean that Hefel teaches calculating something for a plurality of service provider access links. That something, however, is not a performance score, inasmuch as later in the Office Action it is admitted that Hefel does not teach "calculating a plurality of performance scores for the plurality of service provider access links, each of the performance scores indicating performance of a route from a router."

Within the Office Action, it is stated that, at col. 1, lines 35-37 and 49-58, Hefel teaches "selecting a new service provider access link from the plurality of service provider access links for routing the data flow to the prefix, wherein the new service provider access link is an optimal route." It is not asserted, and cannot be asserted, within the Office Action that Hefel teaches that "the new server provider access link has a *performance score*," as recited in the claims of the present invention. Furthermore, the "optimal route" discussed in Hefel is to a node, not to a

prefix.

Cohen

Cohen is directed to distributing calls across distributed call center sites, each with human agents for responding to the calls. (Cohen, Abstract) Cohen discloses keeping statistics on the average speed of answer (ASA) for each site. The ASA is used to determine to which site a call should be routed, where it is handled by the agents, so that the ASA is made uniform across the sites. Thus, customers who call into the system all experience the same wait, without some customers waiting much longer than others. Two different customers' calls may take the same time to connect to a call center (similar to a "transmission speed"), but the first customer's ASA may be larger because he must wait longer for a human agent to finish her current call (similar to a processing speed) to take his call.

As shown in his Figure 1, Cohen discloses using a *single* network provider 20 that receives instructions from a central load balancing application 30 to route incoming calls among agents at agent terminals 110-1 and 110-2. Nowhere does Cohen disclose using a plurality of service provider access links, such as claimed in the present invention.

Within the Office Action, it is stated that at col. 4, lines 19-30, and col. 5, lines 23-32, Cohen teaches "calculating a plurality of performance scores for the plurality of service provider access links, each of the performance scores indicating performance of a route from a router." At col. 4, lines 19-30, Cohen discloses elements for a call center. At col. 5, lines 23-32, Cohen discloses "taking individual Average Speed of Answer (ASA) measurements for each site in periodic intervals," obtaining a normalized score, and using the normalized score to obtain standard deviations across the intervals, which are then "used as a summary performance score for the load balancing process." Furthermore, at col. 4, lines 12-16 of Cohen, also cited within the Office Action, Cohen merely states that "performance data is colleted for distributed call center sites . . . and used for the load balancing application." Thus, Cohen does not determine a performance score for a service provider access link–a score indicating link failure, dropped packets, jitter-- but instead determines a performance score based on an agent's efficiency in handling a call. Cohen's "performance score" is thus different from the "performance score" recited in claims of the present invention.

At paragraph 12 of the Office Action, it is concluded that it would have been obvious to combine Hefel and Cohen because (1) "they both deal with routing analysis for communicating

data" and (2) Cohen's teachings "would improve the functionality of Hefel's system by allowing for more pertinent and additional data to influence routing information."

As explained below, the prior art of record does not disclose each element claimed in the present invention. Even if motivation to combine Hefel and Cohen could be found, that motivation is irrelevant if, as here, the prior art does not teach each element of the claimed invention.

Claims 1, 2 and 9

Within the Office Action, claims 1, 2 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hefel in view of Cohen. The Applicants respectfully traverse these rejections.

Claim 1 is directed to a method of routing a data flow traversing one or more routers in an internetwork. The one or more routers are coupled to a plurality of service provider access links. The method comprises determining a prefix for the data flow and calculating a plurality of performance scores for the plurality of service provider access links. Each of the plurality of performance scores indicates a performance of a route from a router of the one or more routers to the prefix via a distinct service provider access link from the plurality of service provider access links. The method further comprises detecting a current service provider access link for the prefix. The current service provider access link corresponds to a current route to the prefix specified by a routing protocol. The current service provider access link has a performance score from the plurality of service provider access links. The method further comprises selecting a new service provider access link from the plurality of service provider access links for routing the data flow to the prefix. The new server provider access link has a performance score from the plurality of performance scores superior to the performance score for the current service provider access link.

Claim 1 is allowable over the prior art for several reasons. First, as described above, neither Hefel, Cohen, nor their combination teaches determining a prefix for a data flow, as recited in claim 1. Furthermore, neither Hefel, Cohen, nor their combination teaches determining a performance score for a plurality of service provider access links, such as recited in several elements of claim 1. Moreover, because neither Hefel, nor Cohen, nor their combination discusses SPALs, not one teaches, suggests, or provides any motivation for detecting a current service provider or selecting a new service provider access link, as recited in claim 1.

Because neither Hefel, nor Cohen, nor their combination teaches each element of claim 1, claim 1 is allowable. Claims 2 and 9 both depend on claim 1. Accordingly, claims 2 and 9 are both allowable as depending on allowable base claim.

Claims 3-8

Within the Office Action, claims 3-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hefel in view of Cohen, and further in view of U.S. Patent Application Pub. No. 2003/0016770 A1 to Trans et al. and U.S. Patent Application Pub. No. 2002/0124100 A1 to Adams. The Applicants respectfully traverse these rejections.

As described above, claim 1 is allowable. Claims 3-8 all depend on claim 1. Accordingly, claims 3-8 are also all allowable as depending on an allowable base claim.

Claim 10

Within the Office Action, claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Hefel in view of Cohen, and further in view of U.S. Patent No. 5,754,639 to Flockhart et al. The Applicants respectfully traverse these rejections.

As described above, claim 1 is allowable. Claim 10 depends on claim 1. Accordingly, claim 10 is allowable as depending on an allowable base claim.

Claims 23-29

The new claims 23-29 all find support throughout the application as filed. For example, claim 23 finds support at page 7, lines 9-11; claim 24 finds support at page 4, line 2, and at page 8, line 25, to page 9, line 1; claim 25 finds support at page 7, lines 2-5; and claim 26 finds support at page 8, lines 4-7. Claims 27 and 28 recite elements similar to those recited in the original claim 1 and the new claims 23 and 24. Accordingly, for the same reasons given above, claims 27 and 28 find support in the application as filed. Claim 29 finds support at page 10, lines 19-23, of the application.

Claims 23-26 all depend on claim 1. As described above, claim 1 is allowable. Accordingly, claims 23-26 are all also allowable as depending on an allowable base claim.

Claim 27 is allowable for many of the same reasons that claim 1 is allowable. For

example, claim 27 recites "generating a plurality of performance scores for a plurality of routes from the source node to the destination nodes, each performance score corresponding to an access link from one or more access links." As explained above, none of the prior art of record teaches this element. For at least this reason, claim 27 is allowable. Claims 28 and 29 both depend on claim 27 and, accordingly, are all also allowable as depending on an allowable base claim.

CONCLUSION

No new matter has been added by the above amendments. For the reasons given above, the Applicants respectfully submit that claims 1-10 and 23-29 are in condition for allowance, and allowance at an early date would be appreciated. If the Examiner has any questions or comments, the Examiner is encouraged to call the undersigned at (408) 530-9700 so that any outstanding issues can be quickly and efficiently resolved.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

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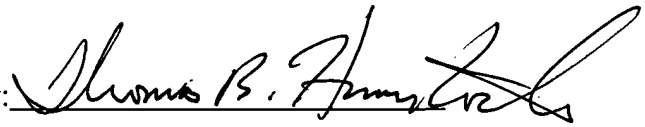
By: 

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